

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/032933

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N5/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, EMBASE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>ENGELMANN K ET AL: "Endothelial cell transplantation and growth behavior of the human corneal endothelium!" DER OPHTHALMOLOGE : ZEITSCHRIFT DER DEUTSCHEN OPHTHALMOLOGISCHEN GESELLSCHAFT. SEP 1999, vol. 96, no. 9, September 1999 (1999-09), pages 555-562, XP002312235 ISSN: 0941-293X the whole document</p> <p style="text-align: center;">----- -/-</p>	<p>1-5, 7-10, 34-43</p>

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

30 December 2004

Date of mailing of the international search report

29.03.05

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	MIYATA K ET AL: "Effect of donor age on morphologic variation of cultured human corneal endothelial cells." CORNEA. JAN 2001, vol. 20, no. 1; January 2001 (2001-01), pages 59-63, XP002312236 ISSN: 0277-3740 the whole document -----	1-5, 7-10, 34-43
X	DATABASE BIOSIS 'Online! BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; December 2002 (2002-12), AMANO SHIRO: "Transplantation of corneal endothelial cells." XP002312237 Database accession no. PREV200300187415 the whole document & NIPPON GANKA GAKKAI ZASSHI, vol. 106, no. 12, December 2002 (2002-12), pages 805-836, ISSN: 0029-0203 -----	1-5,7-10

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-5, 7-10, 16-24, 34-43

A method for in vitro culturing of corneal epithelial cells; cells produced by said method; a method for transporting said cells; a method for storing target tissue that received said cells

2. claim: 6

A method for producing plates coated with extracellular matrix.

3. claims: 11-13

An apparatus for growing cells in culture coated with bovine corneal endothelial cell extracellular matrix.

4. claims: 14, 15

An apparatus for growing cells in culture coated with artificial extracellular matrix.

5. claims: 25-33

A cell depository comprising human corneal endothelial cells; a method for producing said depository.

6. claims: 44-49

A method for denuding a cornea.

7. claims: 50-56

A preparation of a reconstituted extracellular matrix; a method for coating a denuded cornea using said matrix.

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 16-18, are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-5, 7-10, 16-24, 34-43

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.